Introduction to organic chemistry Cheat Sheet

by Fahrinur via cheatography.com/160968/cs/33841/

Formulae of functional groups

The **general** formula is a formula that represents a homologous series of compounds using letters and numbers.

A **homologous series** is a group of organic compounds that have the same functional group, the same general formula, and the same chemical properties.

The **structural formula** is a formula that shows how the atoms are bonded to each carbon atom in a molecule.

The **displayed formula** is a 2D representation of an organic molecule showing all its atoms (by their symbols) and their bonds (by single, double, or triple bonds).

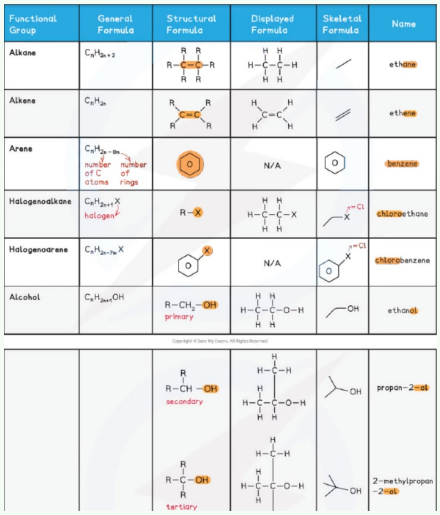
The **skeletal formula** is a simplified displayed formula with all the carbon and hydrogen (C-H) bonds removed.

Molecular & Empirical Formulae

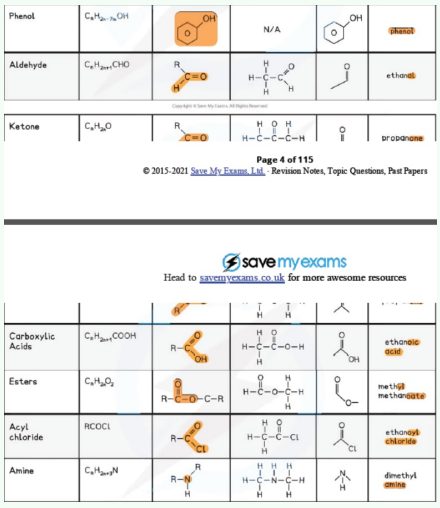
The **molecular formula** shows the *number and type* of each atom in a molecule Eg. the molecular formula of ethanoic acid is C2H4O2

The **empirical formula** shows the *simplest whole number ratio* of the elements present in one molecule of the compound Eg. the empirical formula of ethanol is CH2O

Formulae of functional groups



Formulae of functional groups



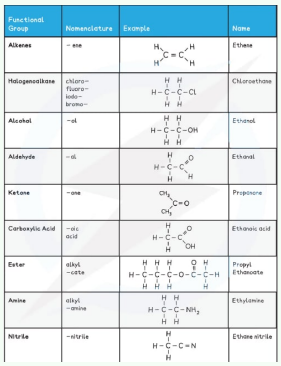
Page 4 of 115
© 2015-2021 Save My Exams, Ltd. · Revision Notes, Topic Questions, Past Papers
savemyexams
Head to savemyexams.co.uk for more awesome resources

Nomenclature of Aliphatic Compounds

Nomenclature of organic compounds table

Number of C atoms	Molecular formula of straight-chain alkane	Name of alkane	Stem used in naming
1	CH_4	methane	meth-
2	C_2H_6	ethane	eth-
3	C_3H_8	propane	prop-
4	C_4H_{10}	butane	but-
5	C_5H_{12}	pentane	pent-
6	C_6H_{14}	hexane	hex-
7	C_7H_{16}	heptane	hept-
8	C_8H_{18}	octane	oct-
9	C_9H_{20}	nonane	non-
10	$C_{10}H_{22}$	decane	dec-

Functional groups & their nomenclature table



By **Fahrinur**
cheatography.com/fahrinur/

Not published yet.
Last updated 26th August, 2022.
Page 1 of 1.

Sponsored by **ApolloPad.com**
Everyone has a novel in them. Finish Yours!
https://apollopad.com